CLAIMS

That which is claimed is:

1. An isolated proteinaceous molecule having canine PTH1 activity, wherein said proteinaceous molecule comprises an amino acid sequence of SEQ ID NO:2, or an amino acid sequence of SEQ ID NO:2 with one or more conservative substitutions therein.

2. An isolated proteinaceous molecule according to claim 1, wherein said amino acid sequence has zero to three conservative substitutions therein.

3. An isolated proteinaceous molecule according to claim 1, wherein said amino acid sequence comprises an amino acid sequence of SEQ ID NO:2.

4. An isolated DNA molecule encoding a proteinaceous molecule according to claim 1.

5. An isolated DNA molecule encoding a proteinaceous molecule according to claim 3.

6. A recombinant expression vector comprising a DNA molecule according to claim 4.

7. A cell transformed by an expression vector according to claim 6.

8. A cell according to claim 7, wherein said cell is that of a prokaryote.

9. A cell according to claim 7, wherein said cell is that of a eukaryote.

10. A cell according to claim 9, wherein said eukaryote is yeast.

11. A cell according to claim 9, wherein said eukaryote is a mammal.

12. A cell according to claim 11, which is a CHO cell.

13. A method of producing a proteinaceous molecule having an activity of canine PTH1, which comprises culturing a cell according to claim 7 for a time sufficient to produce said proteinaceous molecule.

14. A pharmaceutical composition comprising the proteinaceous molecule according to claim 1 and a pharmaceutically acceptable carrier therefor.

15. A pharmaceutical composition comprising the proteinaceous molecule according to claim 3 and a pharmaceutically acceptable carrier therefor.

16. A specific binding partner that selectively binds to the proteinaceous molecule according to claim 1.

17. A method of discovering ligands for the canine PTH1 protein, said method comprising the steps of:

a) combining a test substance with the proteinaceous molecule according to claim 1;

b) measuring specific binding between said test substance and said proteinaceous molecule; and

c) classifying as a ligand said test substance if it binds to said proteinaceous molecule.

18. A method of discovering modulators of canine PTH1 protein activity, said method comprising the steps of:

a) combining a test substance with the proteinaceous molecule according to claim 1;

b) measuring the activity of said proteinaceous molecule in the presence and absence of said test substance and; and

c) classifying said test substance as a modulator of canine PTH1 activity if it modulates the activity of said proteinaceous molecule.